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CUP-STONES NEAR OLD FORT RANSOM, N. D.

BY T. H. LEWIS.

APPARENTLY the earliest mention of cup-stones, in print, was in 1751, in a historical work on the Province of Brandenburg, by J. C. Bekmann. The author speaks of certain boulders there which have on them *näpfchensteine*, or little-bowl-stones, as he terms them. Next, in 1773, there was found at Lynsfors, in North Britain, a druidical altar full of "rock basins," which was pictured in Camden's *Britannia*, 1789. From that time on, at intervals, first incidentally, then by purposed search, interesting discoveries were made until, so far as the rings were concerned, almost every country on the earth was represented. As regards the cups, their distribution has not yet proved to be nearly so widespread. Still they have been found in the British Isles, France, Switzerland, Bohemia, Austria, Northern Germany, the Danish Islands, and Sweden; but these are all the European countries known to possess them, apparently, according to the authorities. Flitting now eastward over vast kingdoms we meet with them again in far-off India. Here, in 1867, Mr. Rivett-Carnac found cup-cuttings upon the stones of the cycloliths of Nagpoor, and, shortly after, upon rocks *in situ* of the mountains of Kumaon, where, in one place, he found them to the number of more than two hundred, arranged in groups of apparently parallel rows. In the Kumaon region he also found ring sculpturing, which very much resembled that which is seen in Europe. Outside of these named countries, and North America to be mentioned further on, the world is a blank as regards cup-cuttings on rocks, so far as our present knowledge goes, or at least to the extent that I have been able to find recorded information of the same.

Although met with and described nearly a century and a half ago, as hereinbefore related, it is only within the last forty-five years that incised cups on rocks and stones have been particularly

written about, either in Europe or in the United States, and speculative theories advanced concerning their origin and uses.

It was in 1847 that Messrs Squier and Davis, partners in original research in the state of Ohio, brought their operations to a close by the production of the "Ancient Monuments of the Mississippi Valley," the comprehensive work which methodically displayed all that was then known of the antiquities of the great region implied by that geographical expression. In this book (on page 206) there is a description, with wood-cut illustration, of a block of sandstone which had been found in some unnamed Ohio mound. The stone weighed between thirty and forty pounds, and showed several circular depressions, evidently artificial, which our authors thought were used as moulds for the purpose of hammering thin plates of copper into small bosses of concavo-convex shape, such as had been often found. This is the prototype of the cup-stones of the western hemisphere.¹

Professor Daniel Wilson, of Toronto, in his "Prehistoric Man," (third edition, 1876, Vol. I.), also devotes several pages to the subject, and gives drawings of two cup-stones found, too, in Ohio. Of the first he speaks thus: "A cupped sandstone block on the banks of the Ohio, a little below Cincinnati. Others much larger were described to me by Dr. Hill," etc. The second one he describes as a "cupped sandstone boulder," found near Tronton [Iron-ton] in 1874. The author, in this work, considers that the use of these cups—everywhere, all the world over—was to grind the ends of stone implements, and that where they were accompanied by concentric circles and other devices the latter were no more than additions of idle fancy.

The late Professor Charles Rau, of Washington, D. C., seems, however, to be the first writer in the United States to bring forward and collate comprehensively in a special treatise the data relating to cup-stones on this side of the Atlantic, and to treat of

¹ Were the facts concerning the *Teololunga* rock, situated sixteen leagues southeast of Orizaba, Mexico, exactly known, it might with propriety take precedence here in the text of the Squier and Davis stone; for it was discovered in 1805 by Captain Dupaix, who said that on its surface were some circular holes of little depth. By reason of the dissimilarity of the published representations of it, however, Professor Rau (1881) thought that a proper doubt remained, not to be removed until the stone had again been examined and reported upon.

their resemblance to those found in the eastern hemisphere. In his "Observations on Cup-Shaped and Other Lapidarian Sculptures in the Old World and America" (1881) he² describes a few specimens whose characteristics are undoubted. The best of these are the "incised rock" in Forsyth County, Georgia; the sandstone block with cup-cavities discovered by Dr. H. H. Hill in Lawrence county, Ohio;³ and the sculptures on Bald Friar Rock in the usquehanna River, Cecil county, Maryland. Toward the end of the work Professor Rau gives the various speculations which have been published as to the purpose for which cup- and ring-cuttings were made, but states that after all that has been said concerning their significance in the Old World, he hardly ventures to offer an opinion of his own. Still he thinks that both kinds of sculpture belong to *one* primitive system, of which the former seems to be the earlier expression. Turning to America, he considers that here, as yet, the number of discovered cup-stones is by far too small to permit the merest attempt at generalization.

The author just referred to has shown in his book that true cup-stones have been found in the United States as far east as Connecticut and as far west as Illinois, but the fact that rocks having such incised work exist also far beyond the Mississippi valley has not yet, apparently, become known to the antiquarian world. It is therefore for the purpose of describing one so located that this paper is written.

The rock in question is situated in Ransom county, North Dakota, and, with others, it came under my observation in the middle of last August, at which time full notes were taken, and the pictographs to be described further on carefully copied.

Ransom county derives its name from a post of the United States army which was formerly maintained on the west side of the Shyenne River, in that part of its course known as the Great Bend. The top of the bluff on which the ruined fort stands is about two-hundred-and-fifty feet above the river. About one-quarter of a mile to the westward, on the north half of the south-

² In "Contributions to North American Ethnology," Vol. V., Washington, 1882.

³ This is the same as the "cupped sandstone boulder" already illustrated in Professor Wilson's "Prehistoric Man" (1876).

west quarter of section 11, town 135, range 58, there is a large spring known as the "Fort Springs," situated in the bottom of a deep ravine, which is about ninety feet below the fort site. It is probably formed by a seepage from "Big Slough," which starts about one mile south and extends some fifteen or twenty miles in a southerly direction. The bluff immediately to the west of the ravine rises to the height of about one-hundred-and-sixty feet, and on the top, over a quarter of a mile away in a northwesterly direction, there is a small knoll which was called "Bear's-Den Hill" by the Indians. On the steep slope of the bluff, about one hundred yards north of west from the spring and fifty-three feet above it, there is a large light-colored granite boulder, on which there are a number of incised lines, cups, and other figures. The base of the boulder, which is firmly imbedded in the side-hill, is eight-and-a-half feet in length and four-and-a-half feet in width, and on the side next to the spring extends out of the ground about three feet. The top surface on which the carvings occur is irregular in outline, and is seven feet two inches in length, and from two feet six inches to three feet ten inches in width, sloping slightly towards the east. The particular figures seen upon it, and reproduced here in fac-simile as regards their forms, are explainable somewhat as follows, viz.:

FIG. 1.—Apparently the horns of some animal.

FIG. 2.—A nondescript. There is a similar figure on the quartzite ledge near Little Cottonwood Falls, in Cottonwood county, Minn.

FIG. 3.—A crescent. This figure is often found along the Mississippi River in Minnesota, Wisconsin, and Iowa.

FIG. 4.—A nondescript animal.

FIG. 5.—A peculiar-shaped cross. There is one similar in form on the face of a cliff a few miles above Stillwater, Minn.

FIGS. 6, 6.—"Pins," so-called. There are two of the same shape on the quartzite ledge, among other figures, near the "Three Maidens," at Pipestone, Minn.

FIGS. 7, 7, 7.—Three pairs of cups, one set being joined by a straight groove, and the other two by curved grooves.⁴

⁴ Sir James Simpson describes and figures an isolated stone near Balvraid, in Inverness-shire, Scotland, which has five pairs of cups that are joined by straight or curved grooves.

FIGS. 8, 8, 8, 8.—Are four long grooves with odd-shaped ends. These grooves are only about one-eighth of an inch in depth, while the ends are from one to one-and-a-half inches in depth.

CUPS (not numbered).—The cups or circular depressions are from about one-half-inch to nearly two inches in diameter, and one inch to one-quarter of an inch in depth. Some are perfect circles, while others are oblong in outline. There are thirty-four single cups and twenty-five cups that are connected with or intersected by grooves, making a total of fifty-nine positive cups, without considering the terminals of the four long grooves and others that are more doubtful. Where grooves intersect the cups an arbitrary line has been drawn on the illustration, in order to separate them and to more fully demonstrate the character of the designs. In every instance where this has been done the cups are well defined, but yet they cannot otherwise be fully shown on a tracing giving only surface outlines.

Within a radius of four hundred feet from the spring there are thirteen incised boulders of various sizes and shapes, the one here described being the largest and finest of the group. The pictures, etc., on five of the best ones were copied; the others having only slight grooves and a few cups were not.

On the bluffs on both sides of the ravine there are a number of ancient mounds of the mound-building period, one of which is located on the west side immediately above the spring.

There are other boulders at various places in the northwest on which these cup-like depressions occur, and they are also occasionally found on the face of perpendicular ledges and on the walls of caves, but in nearly every instance there are other incised figures on the same surface. It may be further stated that the cup-cavities as shown at the terminals of Fig. 5 of the illustration now given are also seen in connection with incised figures on rocks at these other localities referred to.

The cup-stones (large boulders or rocks) are not to be con-

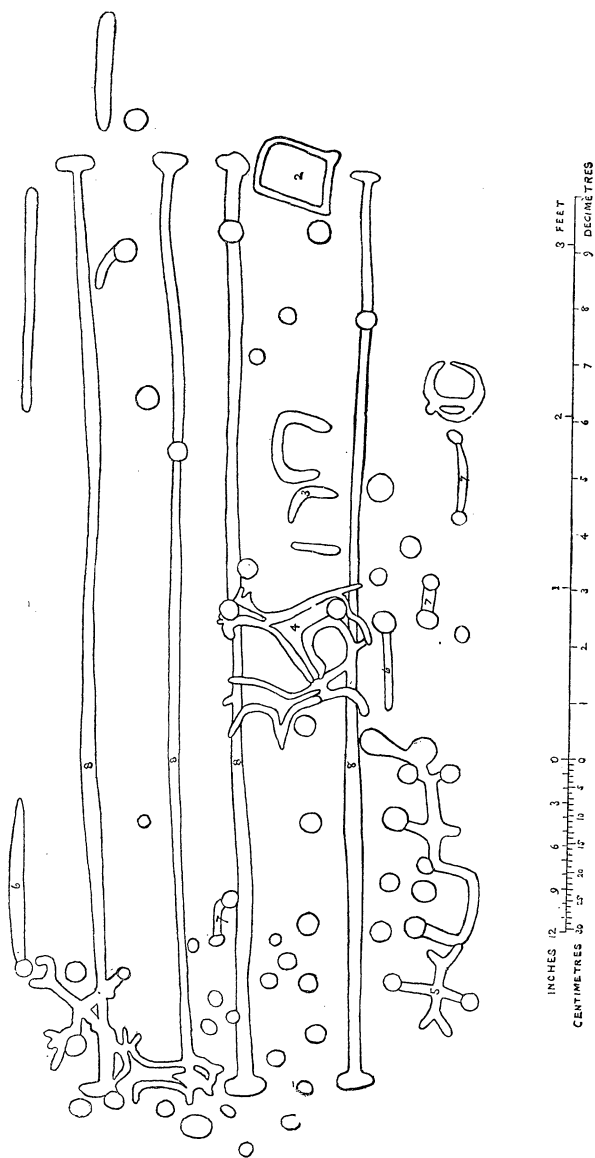
See Plate XIV., 2, of his "Archaic Sculpturings upon Stones in Scotland," etc., Edinburgh, 1867. The same type occurs on boulders and slabs found in France, Switzerland, and Sweden. Similar figures also appear on early British coins prior to Cunobeline's time (A.D. 40), and on the French-Keltic coins of moulded bronze. See Plates LIII. and LV. of Waring's "Stone Monuments," etc., London, 1870.

founded with the smaller stones called "nut-holders" or "anvils," which are from two to twenty inches in diameter, one to four inches in thickness, and which have one or more slight cavities or pits on each face. These cavities average about one inch in diameter, and very rarely exceed one-half inch in depth, the average being one-fourth of an inch. These relics are found throughout the west and south along the streams and lakes, and the prairies are no exception to the rule. Still less should cup-stones proper be confounded with the large circular excavations in rocks found in various regions which have been used as mortars. Mortars are found in fields. The rocks may be ten inches square and upwards, and the cavities range from six to fifteen inches in diameter and from one to five inches in depth. They are also found on the upper surface of ledges and on the tops of very large boulders. In one place in this vicinity there are at least twenty-five mortars on two acres of land.

While the American cup-stones are similar in nearly every respect to those found in Europe and other portions of the globe, it would be the best policy to study them as an entirely separate class of antiquities, for in all probability there is not even a remote connection between the two hemispheres in this respect. After a thorough comparison has been made and the necessary links have been found, there will then be ample time in which to bring forward the facts to prove relationship. In the meanwhile, awaiting thorough exploration of the field, all such attempts, though interesting in a literary point of view, may be considered somewhat premature in a scientific one.

Since the above was written I have examined a book, just published, which treats of the same kind of ancient work. It appears nine or ten years after Rau's, and, so far as known to me, is the only general handling of the subject within that period. Its title is "Archaic Rock Inscriptions; an Account of the Cup and Ring Markings on the Sculptured Stones of the Old and New Worlds." It is of anonymous authorship, but bears the imprint of A. Reader, London, 1891, and is a 12mo of only 99 pages. The writer is evidently one of the mystical antiquarians who, to speak figuratively, have their eyes continually turned to those *ignes fatui* the

PLATE XI.



CUP-STONES.

elusive and ever unapproachable ancient faiths—the Tree, Serpent, Phallic, Fire, Sun, and Ancestor worships—and delight in the search for analogies concerning them. As regards the cup- and ring-markings, he himself adopts the phallic theory for their origin. His little book, however, admirably fulfills the promise of its title, for it not only includes most that prior writers collected, but gives interesting facts not accessible or not discovered when Professor Rau wrote. The most striking piece of new information is concerning the cup- and ring-markings on the rocks in the environs of Ilkley, Yorkshire,—a new locality. Here the cups have been counted into the hundreds in all; many of them are connected by grooves.

As regards America, all that this new author finds—and probably all there is to find—are two articles in the *AMERICAN NATURALIST*. The first one is contained in the number for December, 1884, and is entitled “Rock Inscriptions in Brazil,” by J. C. Branner. The author does not use the word *cups* at all, nor do his diagrams show any; he only mentions in his text certain “points or indentations,” often arranged in parallel vertical lines, and portrays them in the drawings, where also single circles are shown,—mostly provided with a central point. He found, however, “mortars” scooped out on the rocks by the river. The other article appears in the number for July, 1885, under the heading of “Ancient Rock Inscriptions on the Lake of the Woods,” by A. C. Lawson. Neither does this writer mention *cups*, but his illustrations show concentric circles which have the usual central dot.

Tupelo, Mississippi, February 11th, 1891.